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SEQUENCE LISTING

<110> ROUX, SYLVIE
BRULET, PHILIPPE
SAINT CLOMENT, CECILE
BARBIER, JULIEN
MOLGO, JORDI

<120> IN VIVO MODULATION OF NEURONAL TRANSPORT

<130> 03495.0174-02000

<140> 10/662,808

<141> 2003-09-16

<150> 09/816,467

<151> 2001-03-26

<150> 09/129,368

<151> 1998-08-05

<150> 60/055,615

<151> 1997-08-14

<150> 60/065,236

<151> 1997-11-13

<160> 18

<170> PatentIn Ver. 3.2

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<213> Clostridium tetani

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Met Val Phe Ser Thr Pro Ile Pro Phe

1

5

tct tat tct aaa aat ctg gat tgt tgg gtt gat aat gaa gaa gat ata 162

Ser Tyr Ser Lys Asn Leu Asp Cys Trp Val Asp Asn Glu Glu Asp Ile

10

15

20

25

gat gtt ata tta aaa aag agt aca att tta aat tta gat att aat aat 210

Asp Val Ile Leu Lys Lys Ser Thr Ile Leu Asn Leu Asp Ile Asn Asn

30

35

40

gat att ata tca gat ata tct ggg ttt aat tca tct gta ata aca tat 258

Asp Ile Ile Ser Asp Ile Ser Gly Phe Asn Ser Ser Val Ile Thr Tyr

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cca gat gct caa ttg gtg ccc gga ata aat ggc aaa gca ata cat tta	306
Pro Asp Ala Gln Leu Val Pro Gly Ile Asn Gly Lys Ala Ile His Leu	
60 65 70	
gta aac aat gaa tct tct gaa gtt ata gtg cat aaa gct atg gat att	354
Val Asn Asn Glu Ser Ser Glu Val Ile Val His Lys Ala Met Asp Ile	
75 80 85	
gaa tat aat gat atg ttt aat aat ttt acc gtt agc ttt tgg ttg agg	402
Glu Tyr Asn Asp Met Phe Asn Asn Phe Thr Val Ser Phe Trp Leu Arg	
90 95 100 105	
gtt cct aaa gta tct gct agt cat tta gaa caa tat ggc aca aat gag	450
Val Pro Lys Val Ser Ala Ser His Leu Glu Gln Tyr Gly Thr Asn Glu	
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tat tca ata att agc tct atg aaa aaa cat agt cta tca ata gga tct	498
Tyr Ser Ile Ile Ser Ser Met Lys Lys His Ser Leu Ser Ile Gly Ser	
125 130 135	
ggg tgg agt gta tca ctt aaa ggt aat aac tta ata tgg act tta aaa	546
Gly Trp Ser Val Ser Leu Lys Gly Asn Asn Leu Ile Trp Thr Leu Lys	
140 145 150	
gat tcc gcg gga gaa gtt aga caa ata act ttt agg gat tta cct gat	594
Asp Ser Ala Gly Glu Val Arg Gln Ile Thr Phe Arg Asp Leu Pro Asp	
155 160 165	
aaa ttt aat gct tat tta gca aat aaa tgg gtt ttt ata act att act	642
Lys Phe Asn Ala Tyr Leu Ala Asn Lys Trp Val Phe Ile Thr Ile Thr	
170 175 180 185	
aat gat aga tta tct tct gct aat ttg tat ata aat gga gta ctt atg	690
Asn Asp Arg Leu Ser Ser Ala Asn Leu Tyr Ile Asn Gly Val Leu Met	
190 195 200	
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Gly Ser Ala Glu Ile Thr Gly Leu Gly Ala Ile Arg Glu Asp Asn Asn	
205 210 215	
ata aca tta aaa cta gat aga tgt aat aat aat aat caa tac gtt tct	786
Ile Thr Leu Lys Leu Asp Arg Cys Asn Asn Asn Asn Gln Tyr Val Ser	
220 225 230	
att gat aaa ttt agg ata ttt tgc aaa gca tta aat cca aaa gag att	834
Ile Asp Lys Phe Arg Ile Phe Cys Lys Ala Leu Asn Pro Lys Glu Ile	
235 240 245	
gaa aaa tta tac aca agt tat tta tct ata acc ttt tta aga gac ttc	882
Glu Lys Leu Tyr Thr Ser Tyr Leu Ser Ile Thr Phe Leu Arg Asp Phe	
250 255 260 265	
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Trp Gly Asn Pro Leu Arg Tyr Asp Thr Glu Tyr Tyr Leu Ile Pro Val	
270 275 280	

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 Ala Ser Ser Ser Lys Asp Val Gln Leu Lys Asn Ile Thr Asp Tyr Met
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tat ttg aca aat gcg cca tcg tat act aac gga aaa ttg aat ata tat 1026
 Tyr Leu Thr Asn Ala Pro Ser Tyr Thr Asn Gly Lys Leu Asn Ile Tyr
 300 305 310

tat aga agg tta tat aat gga cta aaa ttt att ata aaa aga tat aca 1074
 Tyr Arg Arg Leu Tyr Asn Gly Leu Lys Phe Ile Ile Lys Arg Tyr Thr
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 Pro Asn Asn Glu Ile Asp Ser Phe Val Lys Ser Gly Asp Phe Ile Lys
 330 335 340 345

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gat gga aat gcc ttt aat aat ctt gat aga att cta aga gta ggt tat 1218
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 Arg Asp Leu Lys Thr Tyr Ser Val Gln Leu Lys Leu Tyr Asp Asp Lys
 395 400 405

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 410 415 420 425

gat cca aat agg gat ata tta att gca agc aac tgg tac ttt aat cat 1410
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tta aaa gat aaa att tta gga tgt gat tgg tac ttt gta cct aca gat 1458
 Leu Lys Asp Lys Ile Leu Gly Cys Asp Trp Tyr Phe Val Pro Thr Asp
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 Glu Gly Trp Thr Asn Asp
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<213> Clostridium tetani

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 35 40 45

Gly Phe Asn Ser Ser Val Ile Thr Tyr Pro Asp Ala Gln Leu Val Pro
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Gly Ile Asn Gly Lys Ala Ile His Leu Val Asn Asn Glu Ser Ser Glu
 65 70 75 80

Val Ile Val His Lys Ala Met Asp Ile Glu Tyr Asn Asp Met Phe Asn
 85 90 95

Asn Phe Thr Val Ser Phe Trp Leu Arg Val Pro Lys Val Ser Ala Ser
 100 105 110

His Leu Glu Gln Tyr Gly Thr Asn Glu Tyr Ser Ile Ile Ser Ser Met
 115 120 125

Lys Lys His Ser Leu Ser Ile Gly Ser Gly Trp Ser Val Ser Leu Lys
 130 135 140

Gly Asn Asn Leu Ile Trp Thr Leu Lys Asp Ser Ala Gly Glu Val Arg
 145 150 155 160

Gln Ile Thr Phe Arg Asp Leu Pro Asp Lys Phe Asn Ala Tyr Leu Ala
 165 170 175

Asn Lys Trp Val Phe Ile Thr Ile Thr Asn Asp Arg Leu Ser Ser Ala
 180 185 190

Asn Leu Tyr Ile Asn Gly Val Leu Met Gly Ser Ala Glu Ile Thr Gly
 195 200 205

Leu Gly Ala Ile Arg Glu Asp Asn Asn Ile Thr Leu Lys Leu Asp Arg
 210 215 220

Cys Asn Asn Asn Asn Gln Tyr Val Ser Ile Asp Lys Phe Arg Ile Phe
 225 230 235 240

Cys Lys Ala Leu Asn Pro Lys Glu Ile Glu Lys Leu Tyr Thr Ser Tyr
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Leu Ser Ile Thr Phe Leu Arg Asp Phe Trp Gly Asn Pro Leu Arg Tyr
 260 265 270

Asp Thr Glu Tyr Tyr Leu Ile Pro Val Ala Ser Ser Ser Lys Asp Val
 275 280 285

Gln Leu Lys Asn Ile Thr Asp Tyr Met Tyr Leu Thr Asn Ala Pro Ser
 290 295 300

Tyr Thr Asn Gly Lys Leu Asn Ile Tyr Tyr Arg Arg Leu Tyr Asn Gly
 305 310 315 320
 Leu Lys Phe Ile Ile Lys Arg Tyr Thr Pro Asn Asn Glu Ile Asp Ser
 325 330 335
 Phe Val Lys Ser Gly Asp Phe Ile Lys Leu Tyr Val Ser Tyr Asn Asn
 340 345 350
 Asn Glu His Ile Val Gly Tyr Pro Lys Asp Gly Asn Ala Phe Asn Asn
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 385 390 395 400
 Val Gln Leu Lys Leu Tyr Asp Asp Lys Asn Ala Ser Leu Gly Leu Val
 405 410 415
 Gly Thr His Asn Gly Gln Ile Gly Asn Asp Pro Asn Arg Asp Ile Leu
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 agcttttggg tgagggttcc taaagtatct gctagtcatt tagaacaata tggcacaaat 360
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 aaactagata gatgtaataa taataatcaa tacgtttcta ttgataaatt taggatattt 720
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gtacaactta aattatatga tgataaaaaat gcatctttag gactagtagg tacccataat 1260
 ggtcaaataag gcaacgatcc aaatagggat atattaattg caagcaactg gtactttaat 1320
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<220>
 <223> Description of Artificial Sequence: Primer

<400> 5
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<220>
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 <223> Description of Artificial Sequence: Synthetic
 oligonucleotide linker

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<220>
 <223> Description of Artificial Sequence: Primer

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24

<210> 14
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<220>
 <223> Description of Artificial Sequence: Primer

<400> 14
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<210> 17
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<210> 18
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